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(54) **FUNNEL SHAPED CHARGE INLET**

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(52) **U.S. Cl.**
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(58) **Field of Classification Search**

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See application file for complete search history.

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(57) **ABSTRACT**

A vehicle charge inlet integrated into a port assembly surface is provided. The charge inlet includes an inlet housing with a perimeter that is curvilinear, non-cylindrical and shaped so that only a single orientation of a complementary sized and shaped electrical connector may be inserted into the inlet. A plurality of electrical contacts, a latching mechanism and a divider are also integrated into the charge inlet housing, the divider extending from the bottom surface of the inlet housing and configured to fit within a complementary slot of the charge connector, the divider providing further electrical isolation between the electrical contacts. A funneling surface connects the open end of the inlet housing to the port assembly surface.

19 Claims, 7 Drawing Sheets

